

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022841**Date Inspected:** 23-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. LIU HUA JIE**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the edge plate to deck plate hold back weld joint located on 12CW at east side. The weld is designated as CA3010-006. The welder is identified as 066443. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2212-TC-U4b-FCM-1.

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the longitudinal shear plate to floor beam weld joint located on 13AE at cross beam side. The weld is designated as SEG3007R-152. The welder is identified as 040367. ZPMC QC Mr. WANG XIANG PIN was onsite monitoring

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the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2233-ESAB.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the edge plate to deck plate hold back weld joint located on 13AW at west side. The weld is designated as SEG3013-001. The welder is identified as 037779. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2212-TC-U4b-FCM-1.

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the longitudinal shear plate to floor beam weld joint located on 13AE at bike path side. The weld is designated as SEG3007S-178. The welder is identified as 052763. ZPMC QC Mr. WANG XIANG PIN was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2233-ESAB.

2. NDT:

Magnetic Particle Testing (MT):

MT carried out for the ZPMC submitted Notification No 08909.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area that has been previously tested and accepted by ZPMC MT technicians. This QA Inspector generated a TL-6028 MT report on this date. The members are identified as fillet weld joint between stiffener to floor beam & longitudinal diaphragm weld joint located on 13CE at bike path side. The weld designation numbers is as follows:

1. FB3154-001-001, 002, 004, 005, 007, 008.
2. FB3154A-001-026, 027, 033, 034, 039, 040, 045, 046, 051, 052, 057, 058.
3. LD3030-001-219, 220, 243, 244, 247, 248, 271, 272, 275, 276, 299, 300, 303, 304, 327, 328, 331, 332.
4. SEG3011N-182, 147, 148, 143, 144, 139, 140, 135, 136, 131, 132, 127, 128, 123, 124, 119, 120, 115, 116.
5. SEG3011G-018.
6. SEG3011J-019.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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Inspected By: Pillai,Santosh

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer